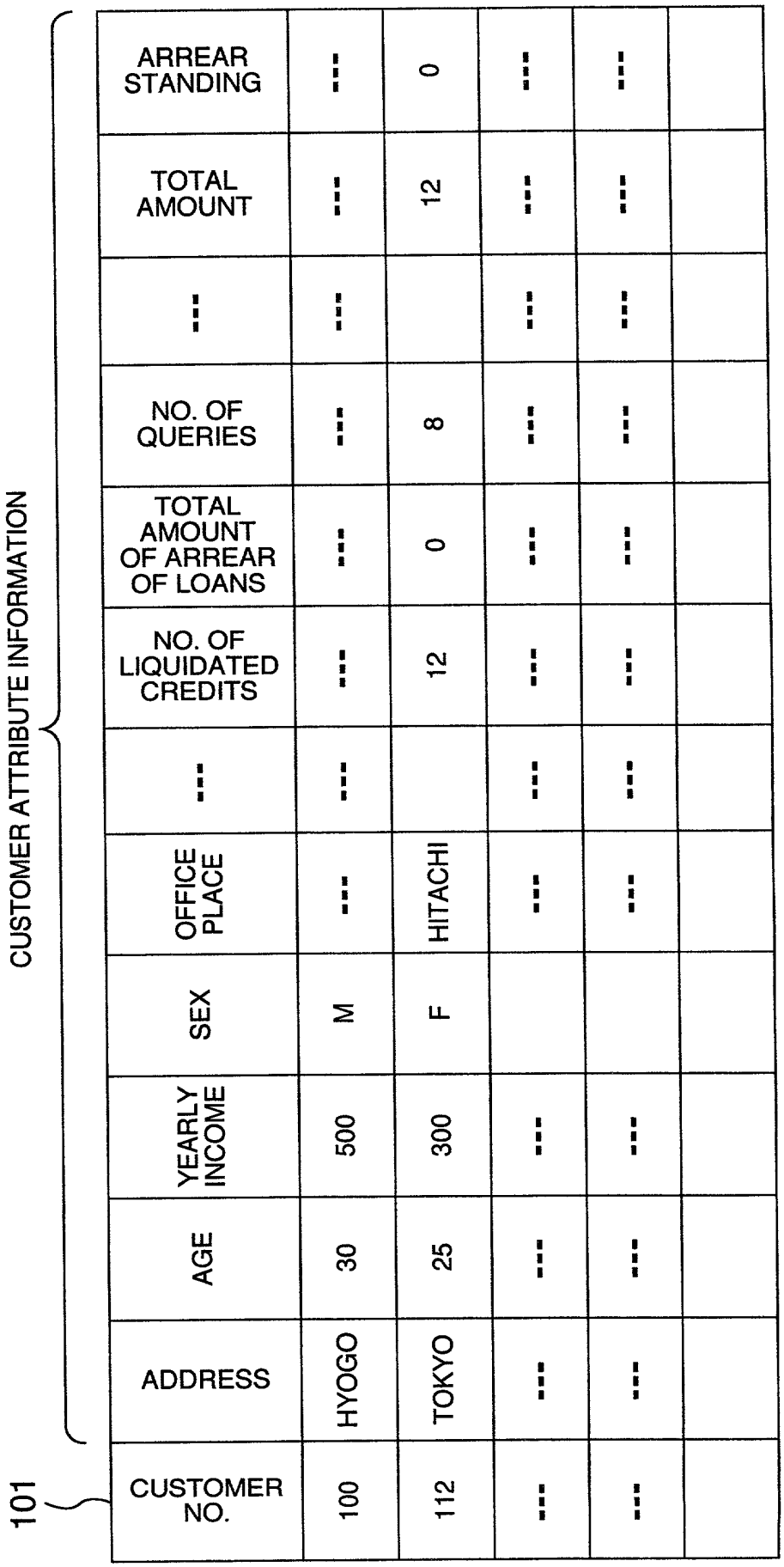
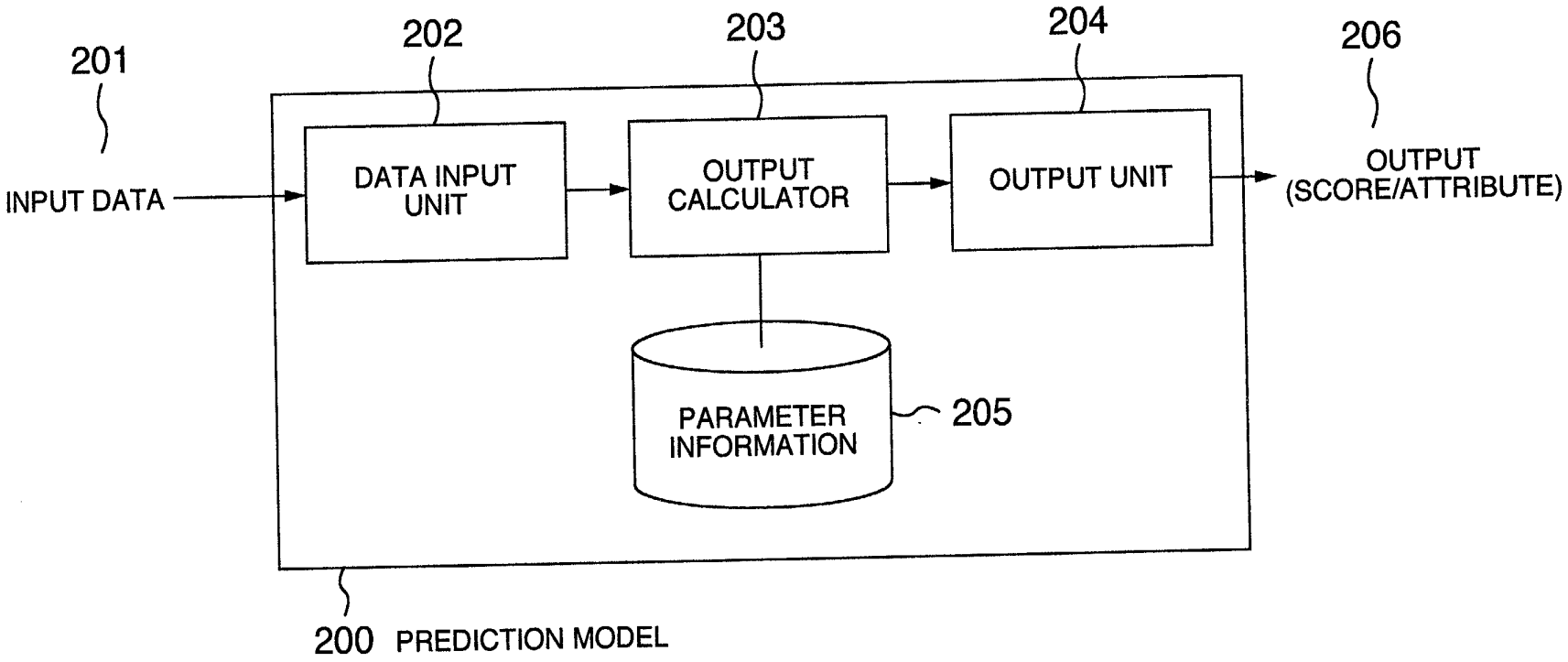
FIG.1


101
102
CUSTOMER ATTRIBUTE INFORMATION
CUSTOMER NO.
ADDRESS
AGE
YEARLY INCOME
SEX
OFFICE PLACE

NO. OF LIQUIDATED CREDITS
TOTAL AMOUNT OF ARREAR OF LOANS
NO. OF QUERIES

TOTAL AMOUNT
ARREAR STANDING
100 HYOGO 30 500 M --- --- --- --- --- --- ---
112 TOKYO 25 300 F HITACHI --- 12 0 8 --- 12 0
--- --- --- --- --- --- --- --- --- --- ---
--- --- --- --- --- --- --- --- --- --- ---

FIG.2


201
202
203
204
206
INPUT DATA
DATA INPUT UNIT
OUTPUT CALCULATOR
OUTPUT UNIT
OUTPUT (SCORE/ATTRIBUTE)
PARAMETER INFORMATION
205
200 PREDICTION MODEL

PGCTTS-2018260

FIG.3

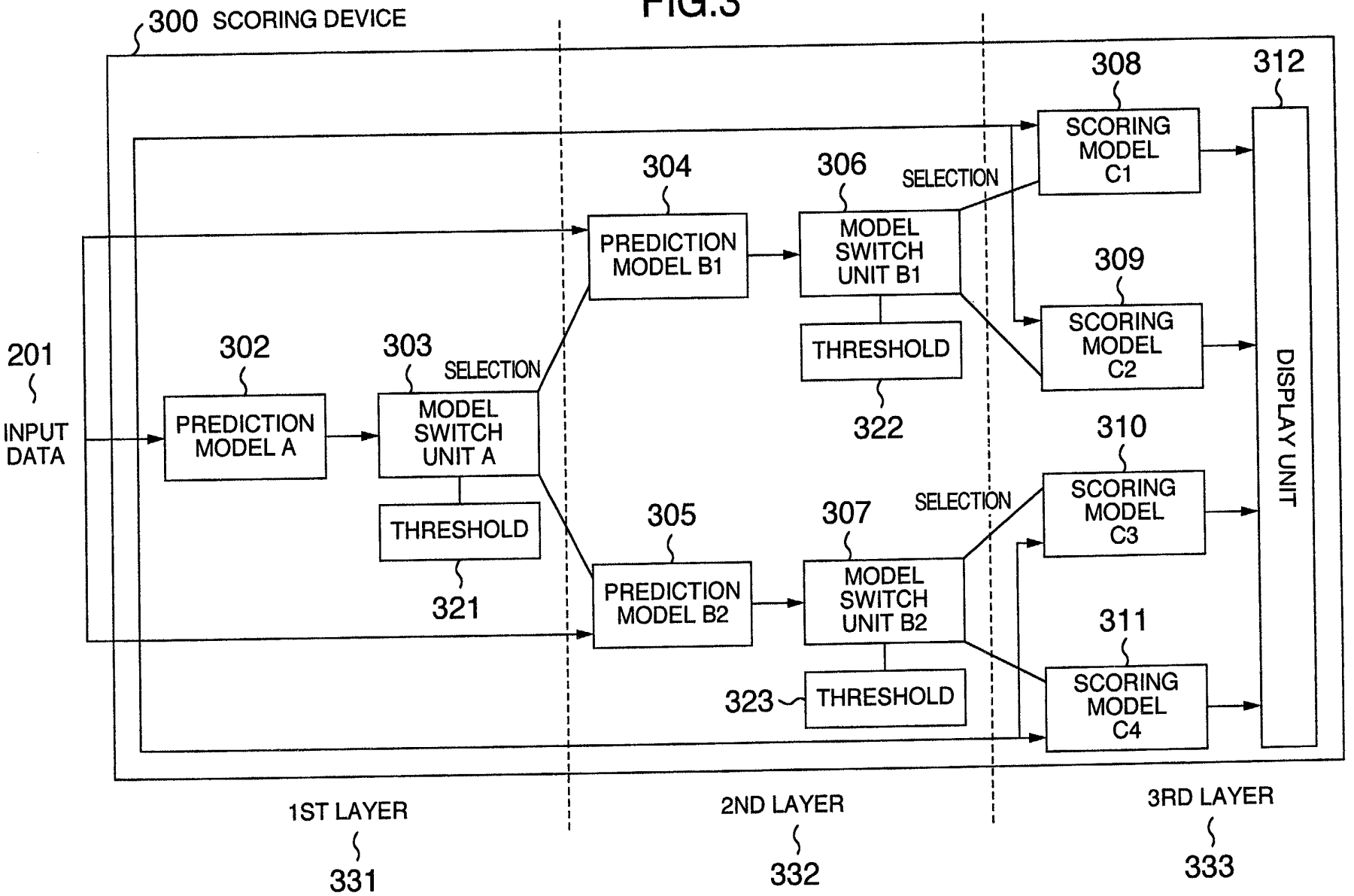


FIG.4

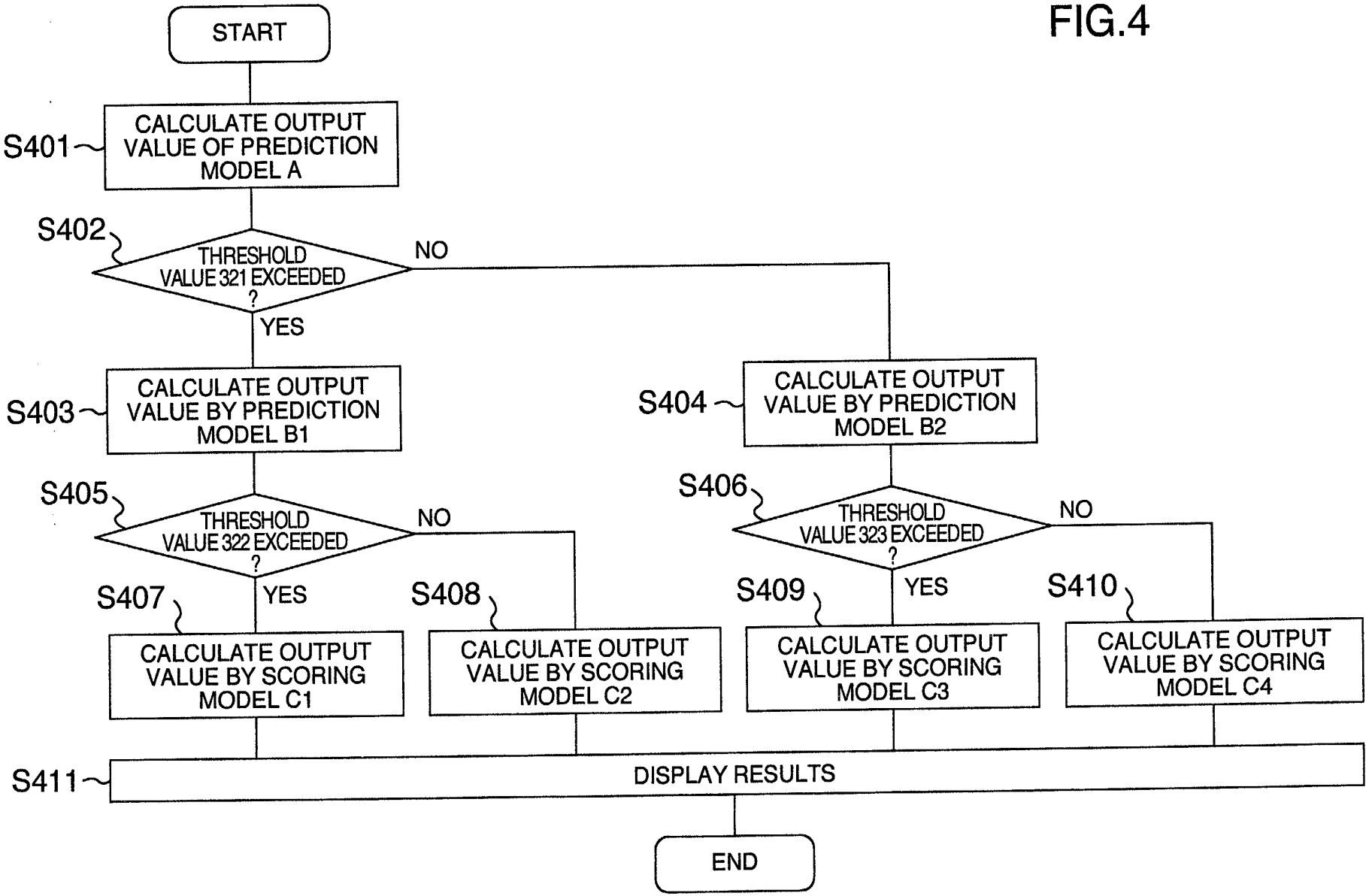

START
S401
CALCULATE OUTPUT VALUE OF PREDICTION MODEL A
S402
THRESHOLD VALUE 321 EXCEEDED ?
NO
YES
S403
CALCULATE OUTPUT VALUE BY PREDICTION MODEL B1
S404
CALCULATE OUTPUT VALUE BY PREDICTION MODEL B2
S405
THRESHOLD VALUE 322 EXCEEDED ?
NO
YES
S406
THRESHOLD VALUE 323 EXCEEDED ?
NO
YES
S407
CALCULATE OUTPUT VALUE BY SCORING MODEL C1
S408
CALCULATE OUTPUT VALUE BY SCORING MODEL C2
S409
CALCULATE OUTPUT VALUE BY SCORING MODEL C3
S410
CALCULATE OUTPUT VALUE BY SCORING MODEL C4
S411
DISPLAY RESULTS
END

FIG.5

500 SCORE CALCULATION MODEL SWITCH TABLE

501 MODEL SWITCH UNIT	502 MODEL SWITCH CONDITION	503 PREDICTION MODEL
A	PREDICTED YEARLY INCOME ≥ 4 MILLIONS	B1
	PREDICTED YEARLY INCOME < 4 MILLIONS	B2
B1	PREDICTED AGE ≥ 35 YEARS	C1
	PREDICTED AGE < 35 YEARS	C2
B2	PREDICTED TENURE OF OFFICE ≥ 10 YEARS	C3
	PREDICTED TENURE OF OFFICE < 10 YEARS	C4

FIG.6

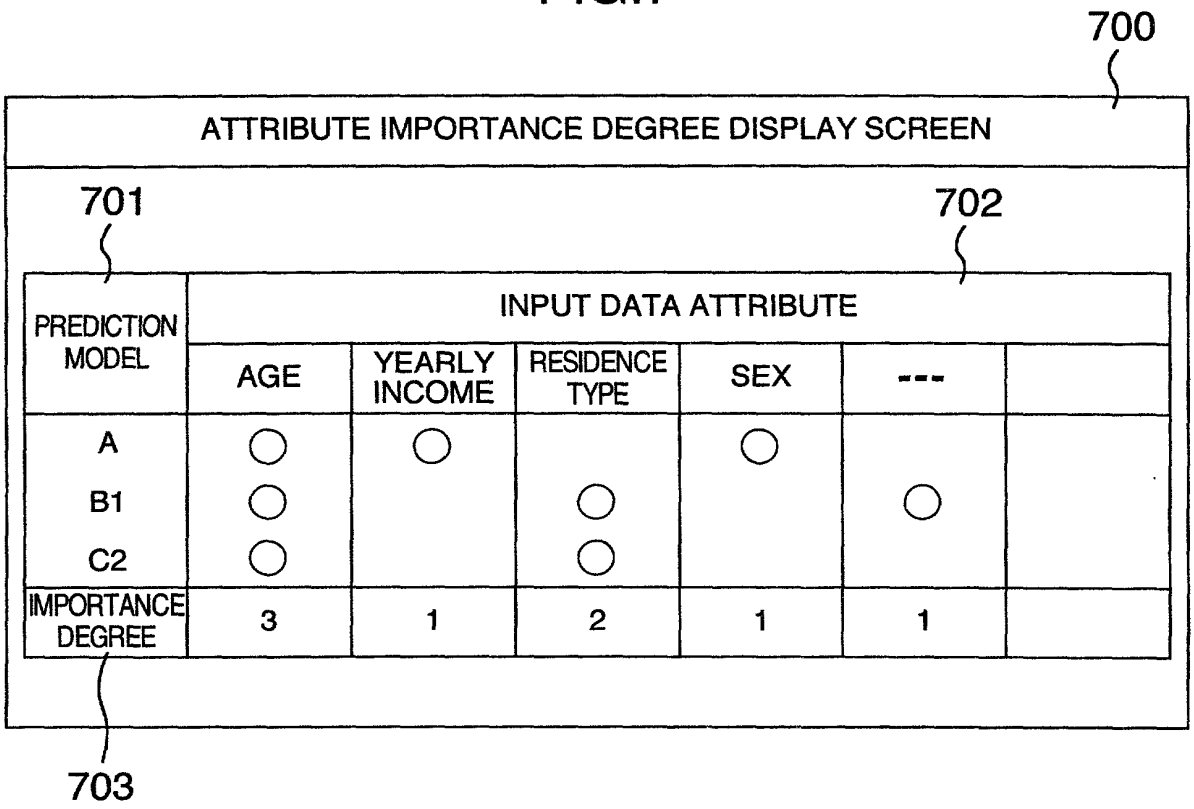
600

ATTRIBUTE PREDICTED VALUE•SCORE DISPLAY SCREEN

601 ATTRIBUTE NAME	602 REAL-WORLD DATA	603 PREDICTED VALUE
AGE	33 YEARS	33 YEARS
YEARLY INCOME	5 MILLIONS	3.5 MILLIONS
TENUAR OF OFFICE	10 YEARS	5 YEARS
DURATION OF RESIDENCE	5 YEARS	• • •
POST	SECTION CHIEF	• • •
• • •		

SCORE : 0.72 ~ 604

FIG.7


700
ATTRIBUTE IMPORTANCE DEGREE DISPLAY SCREEN
701
702
PREDICTION MODEL
INPUT DATA ATTRIBUTE
AGE
YEARLY INCOME
RESIDENCE TYPE
SEX

A
B1
C2
IMPORTANCE DEGREE
3
1
2
1
1
703

FIG.8

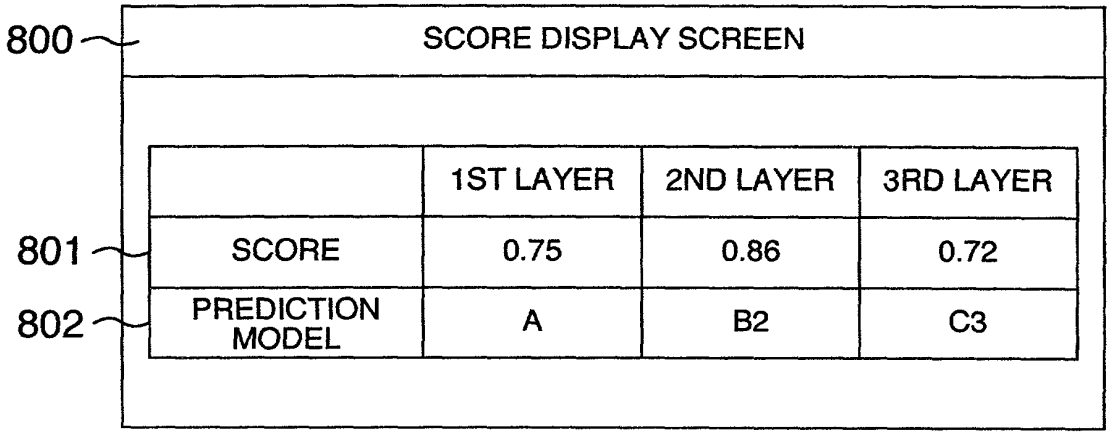

800
SCORE DISPLAY SCREEN
1ST LAYER
2ND LAYER
3RD LAYER
801
SCORE
0.75
0.86
0.72
802
PREDICTION MODEL
A
B2
C3

FIG.9

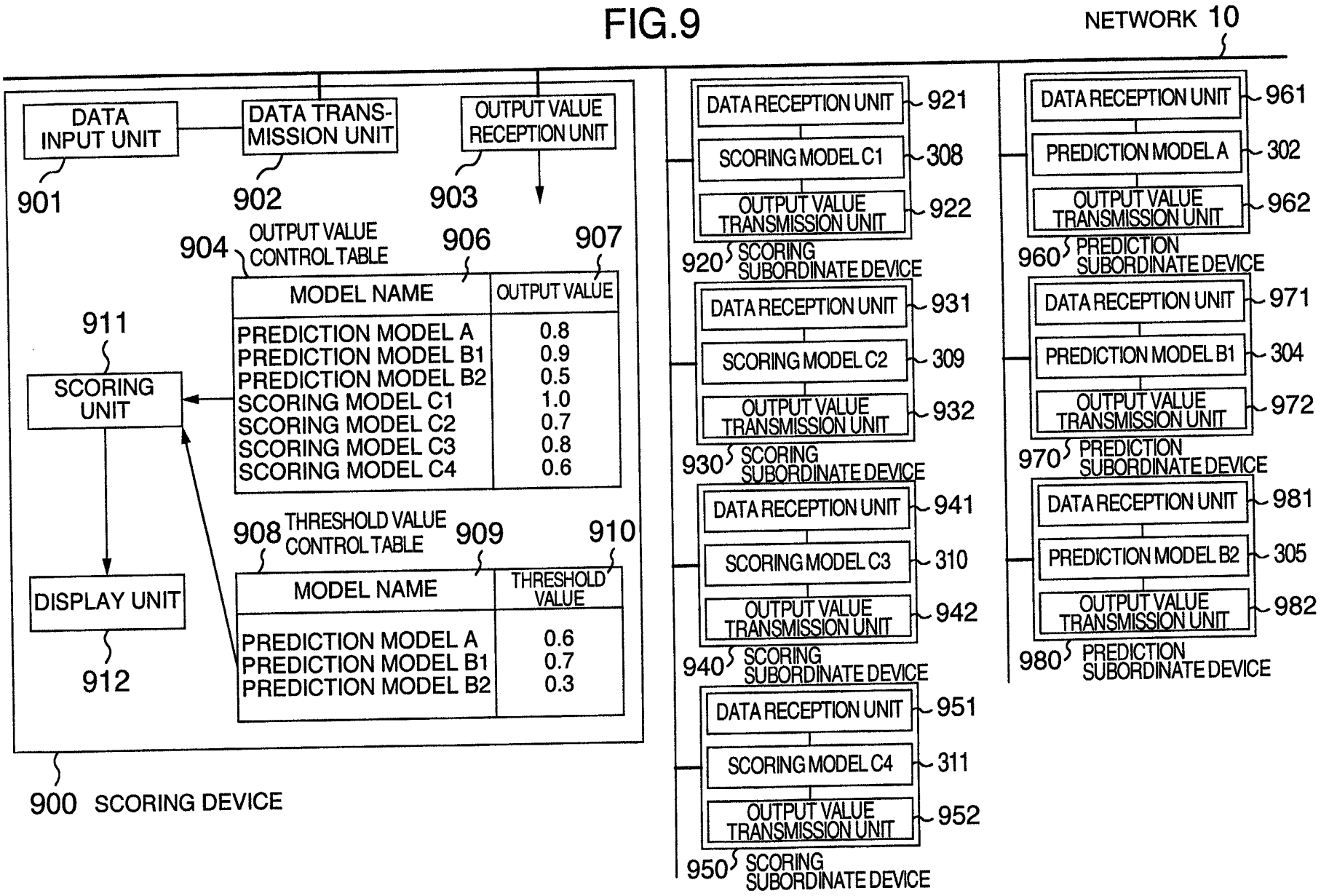
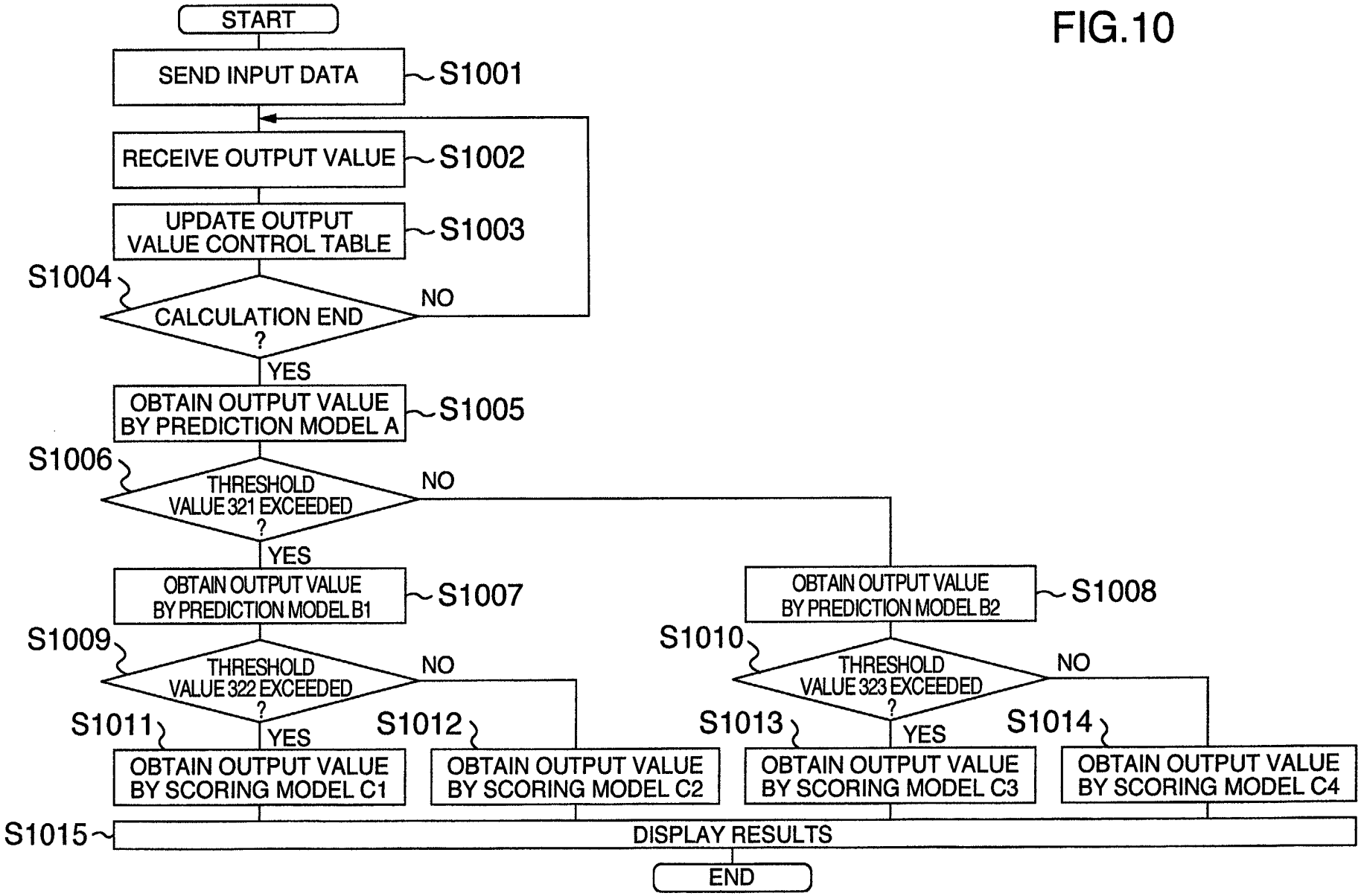

NETWORK 10
DATA INPUT UNIT
901
DATA TRANS-MISSION UNIT
902
OUTPUT VALUE RECEPTION UNIT
903
904 OUTPUT VALUE CONTROL TABLE
906
907
MODEL NAME
OUTPUT VALUE
PREDICTION MODEL A 0.8
PREDICTION MODEL B1 0.9
PREDICTION MODEL B2 0.5
SCORING MODEL C1 1.0
SCORING MODEL C2 0.7
SCORING MODEL C3 0.8
SCORING MODEL C4 0.6
911
SCORING UNIT
DISPLAY UNIT
912
908 THRESHOLD VALUE CONTROL TABLE
909
910
MODEL NAME
THRESHOLD VALUE
PREDICTION MODEL A 0.6
PREDICTION MODEL B1 0.7
PREDICTION MODEL B2 0.3
900 SCORING DEVICE
DATA RECEPTION UNIT 921
SCORING MODEL C1 308
OUTPUT VALUE TRANSMISSION UNIT 922
920 SCORING SUBORDINATE DEVICE
DATA RECEPTION UNIT 931
SCORING MODEL C2 309
OUTPUT VALUE TRANSMISSION UNIT 932
930 SCORING SUBORDINATE DEVICE
DATA RECEPTION UNIT 941
SCORING MODEL C3 310
OUTPUT VALUE TRANSMISSION UNIT 942
940 SCORING SUBORDINATE DEVICE
DATA RECEPTION UNIT 951
SCORING MODEL C4 311
OUTPUT VALUE TRANSMISSION UNIT 952
950 SCORING SUBORDINATE DEVICE
DATA RECEPTION UNIT 961
PREDICTION MODEL A 302
OUTPUT VALUE TRANSMISSION UNIT 962
960 PREDICTION SUBORDINATE DEVICE
DATA RECEPTION UNIT 971
PREDICTION MODEL B1 304
OUTPUT VALUE TRANSMISSION UNIT 972
970 PREDICTION SUBORDINATE DEVICE
DATA RECEPTION UNIT 981
PREDICTION MODEL B2 305
OUTPUT VALUE TRANSMISSION UNIT 982
980 PREDICTION SUBORDINATE DEVICE

FIG.10


START
SEND INPUT DATA
S1001
RECEIVE OUTPUT VALUE
S1002
UPDATE OUTPUT VALUE CONTROL TABLE
S1003
S1004
CALCULATION END ?
NO
YES
OBTAIN OUTPUT VALUE BY PREDICTION MODEL A
S1005
S1006
THRESHOLD VALUE 321 EXCEEDED ?
NO
YES
OBTAIN OUTPUT VALUE BY PREDICTION MODEL B1
S1007
OBTAIN OUTPUT VALUE BY PREDICTION MODEL B2
S1008
S1009
THRESHOLD VALUE 322 EXCEEDED ?
NO
YES
S1010
THRESHOLD VALUE 323 EXCEEDED ?
NO
YES
S1011
OBTAIN OUTPUT VALUE BY SCORING MODEL C1
S1012
OBTAIN OUTPUT VALUE BY SCORING MODEL C2
S1013
OBTAIN OUTPUT VALUE BY SCORING MODEL C3
S1014
OBTAIN OUTPUT VALUE BY SCORING MODEL C4
S1015
DISPLAY RESULTS
END